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10/568,580

02/17/2006

Satoshi Nakamae

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EXAMINER

CHEUNG, CHUN HOI

ART UNIT

PAPER NUMBER

3728

NOTIFICATION DATE

DELIVERY MODE

02/04/2011

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

OfficeAction25944@oliff.com  
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|                              |                                      |   |  |
|------------------------------|--------------------------------------|---|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/568,580 | <b>Applicant(s)</b><br>NAKAMAE, SATOSHI |  |
|                              | <b>Examiner</b><br>CHUN CHEUNG       | <b>Art Unit</b><br>3728                 |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 January 2011.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 and 5-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 5-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/12/2011 has been entered.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

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4. Claims 1 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saito (JP 2003-222992) in view of Fosnight et al (6,216,873) and Eckel et al (4,877,673).

As to claim 1, Saito discloses a substrate storage case with a square shape (Figure 1), comprising a bottom lid (1); a top lid (2) connected through a hinge (3) to the bottom lid (1) so as to open and close the bottom lid (1) and forming an engagement part between the bottom lid and the top lid, wherein lower support parts (16, 162) are disposed in four corners of the bottom lid (Figures 1 and 3), each of the lower support parts being brought in contact with the substrate on the bottom face side thereof, and upper support portions (26 and 262) are disposed in four corners of the top lid (Figures 1 and 3), each of the upper support parts (60) being brought in contact with substrate on a top face side thereof. However, Saito does not disclose the lower support parts being brought in contact with a pair of edge of the substrate on the bottom surface and the upper support part being brought in contact with a pair of edge of the substrate on the upper surface, and does not disclose each of the lower support parts and each of the upper support parts includes a pair of support portions having an L-shape in contact with the pair of edges of the substrate and a space at a middle portion of the L-shape not being in contact with the substrate, wherein the L-shape is formed by two edges that are spaced apart from one another to form a gap between the two edge and each of the pair of support portion in each of the lower support parts and in each of the upper support parts including an oblique face being in contact with a corner edge of the substrate to clamp the substrate from a lower side and from an upper side between the

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support portions of the lower support parts and the support portion of the upper support parts so that vertical and horizontal movement of the substrate is substantially prevented, and the support parts and the lower support parts being symmetrically constructed to each other. Nevertheless, Fosnight et al discloses the lower support parts (126) being brought in contact with a pair of edge (corner edge) of the substrate (127) on the bottom surface (Figure 16) and the upper support part (148) being brought in contact with a pair of edge (Figure 14) of the substrate (127) on the upper surface (Figure 14), Fosnight further discloses each of the lower support parts and each of the upper support parts includes a pair of support portions having an L-shape (Figure 7 and Figure 12) in contact with the pair of edges of the substrate, and each of the pair of support portion in each of the lower support parts and in each of the upper support parts including an oblique face (129, 130, 149 and 150) being in contact with a corner edge of the substrate to clamp the substrate from a lower side and from an upper side between the support portions of the lower support parts and the support portion of the upper support parts (Figure 12 and 13) so that vertical and horizontal movement of the substrate is substantially prevented (column 7, lines 15-19). It would have been obvious to a person having ordinary skill in the art at the time of the invention was made to modify the support parts of Saito with L-shape support part position above and below the substrate with oblique face of Fosnight to stabilized the substrate by clamping the substrate between the two oblique support part of the top and bottom supporting member.

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Saito as modified by Fosnight as discussed in claim above, does not disclose a space at a middle portion of the L-shape not being contact with the substrate and the L-shape is formed by two edges that are spaced apart from one another to form a gap between the two edges.

However, Eckel discloses a L-shape corner protector (101, Figure 3) having a space (4) at a middle portion of the L-shape not being contact with corner of article (W) L-shape is formed by two edges that are spaced apart from one another to form a gap between the two edges (W). It would have been obvious to a person having ordinary skill in the art at the time of the invention was made to modify the supporting member of Saito as modified with groove in between the L-shape supporting member as taught by Eckel to prevent contact with sharp edge of the article and damage the sharp corner of the article.

As to claim 12, Saito further discloses each of the lower support parts is formed integrally with the bottom lid; and each of the upper parts is formed integrally with the top lid (Figure 1 and 2).

5. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Saito (JP 2003-222992), Fosnight et al (6,216,873) and Eckel et al (4,877,673), further in view of Tokushima (JP10-010705).

As to claim 5, Saito as modified in claim 1, further discloses the lower support parts of the bottom lid and the upper support parts of the top lid are position symmetrically with each other. However, Saito as modified does not discloses the

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upper supports and lower supports have shape symmetrical with each other.

Nevertheless, Tokushima discloses the lower support (60) of the bottom lid (52) and the upper support parts (60) of the top lid (58) are shape symmetrical with each other (Figure 1). It would have been obvious to a person having ordinary skill in the art at the time of the invention was made to modify the upper and lower portion of Saito with symmetrical shape as taught by Tokushima to reduce the manufacturing cost by producing the shape for upper and lower support portion.

6. Claims 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saito (JP 2003-222992), Fosnight et al (6,216,873) and Eckel et al (4,877,673), further in view of Kosugi (4,776,462).

As to claims 6 and 7, Saito as modified in claim 1, further discloses a lock part (13, 24) disposed in a side of the bottom lid to lock the bottom lid and the top lid. However, Saito as modified does not disclose the lock part is disposed lower than a center in the thickness direction of the case and the hinge is positioned on a side of the top lid higher than the center in the thickness direction of the case, and engagement part between the bottom lid and the top lid extends obliquely and downwards from the hinge toward the lock part; and a space is formed under the substrate on a side of the lock part of the bottom lid to insert a finger of an automatic transport arm. Nevertheless, Kosugi `462 discloses a case with opening is lower than a center in the thickness direction of the case (Figure 1B and Figure 1C) and the hinge (2a) is positioned on a side of the top lid (3) higher than the center in the thickness direction of the case

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(Figures 1B and 1C) and the engagement part (Figure 1B and Figure 1C) between the bottom lid (2) and the top lid (3) extends obliquely and downwards from the hinge toward the lock part and a space (Figure 4B) is formed under the substrate on a side of the lock part of the bottom lid (2) to insert a finger of an automatic transport arm. It would have been obvious to a person having ordinary skill in the art at the time of the invention was made to modify the substrate container of Saito as modified with opening lower than a center in the thickness direction of the case and hinge is positioned on a side of the top lid (3) higher than the center in the thickness direction of the case and space is formed underneath the substrate as taught by Kosugi for easy access of the substrate and the automatic arm handling mechanism can easily hold or grip the substrate within the container (column 3, lines 61-64).

7. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Saito (JP 2003-222992), Fosnight et al (6,216,873) and Eckel et al (4,877,673), further in view of Scherb (5,259,523).

As to claim 8, Saito as modified does not disclose the step portion is provided in an outer face of each of four corners in each of the bottom lid and the top lid, the outer face of each of the four corners in each of the bottom lid and the top lid being thinner than a rest of the bottom lid and the top lid. However, Scherb discloses the step portion (Figure 2) is provided in an outer face of each of four corners in each of the bottom lid (30) and the top lid (28), the outer face of each of the four corners in each of the bottom lid and the top lid being thinner than a rest of the bottom lid and the top lid (Figures 4 and 5). It would have been obvious to a person having ordinary skill in the



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art at the time of the invention was made to modify the substrate container of Saito with step portion as taught by Scherb for the purpose of insert strap for securely close the top and bottom lid.

8. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Saito (JP 2003-222992), Fosnight et al (6,216,873) Eckel et al (4,877,673) and Scherb (5,259,523) in above claim 8, further in view of Yamauchi (5,353,934).

As to claim 9, Saito as modified in claim 8 above, does not disclose the clamp member provided between the step portion of the bottom lid and the step portion of the top lid corresponding to the step portion of the bottom lid wherein the clamp member stands the bottom lid and the top lid. However, Yamauchi discloses a clamp member (4) provided between the step portion (8) of the bottom lid (3) and the step portion (8) of the top lid (2) corresponding to the step portion (8) of the bottom lid (3) wherein Yamauchi discloses the claimed invention except for the clamp (4) members clamps and also stands the bottom lid and the top lid. As place the storage box vertically, the clamp member as describe by Yamauchi is capable to act as a stand for the storage box. It would have been obvious to a person having ordinary skill in the art at the time of the invention was made to modify the substrate container of Saito as modified with clamp portion provided between the step portion as taught by Yamauchi to securely clamp the top lid and bottom lid together.

9. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Saito (JP 2003-222992), Fosnight et al (6,216,873) and Eckel et al (4,877,673), further in view of Freed (3,615,006).

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As to claim 10, Saito as modified does not disclose the concave and convex portions of the bottom lid and the top lid have the round shapes. However, Freed discloses the concave and convex portions (34) of the bottom lid (10) and the top lid (12) have the round shapes (Figure 2). It would have been obvious to a person having ordinary skill in the art at the time of the invention was made to modify the substrate container of Saito with the concave and convex portions of the bottom lid and the top lid have the top shape as taught by Freed to prevent dust enter the container.

10. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Saito (JP 2003-222992), Fosnight et al (6,216,873) and Eckel et al (4,877,673), further in view of Yamauchi (5,353,934).

As to claim 11, Saito as modified in claim 10 above, does not disclose the bottom lid and the top lid is formed of conductive plastic. However, Yamauchi `934 discloses each of the bottom lid (3) and the top lid (2) is formed of conductive plastic (Column 3, line 55-69 to Column 4, line 1-4). It would have been obvious to a person having ordinary skill in the art at the time of the invention was made to modify the substrate container of Saito with bottom lid and the top lid formed of conductive plastic as taught by Yamauchi to restrain dust generation or accumulation due to vibration.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHUN CHEUNG whose telephone number is (571)270-5702. The examiner can normally be reached on Monday to Friday: 8:30AM~ 6:00AM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mickey Yu can be reached on (571)272-4562. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/CHUN CHEUNG/  
Examiner, Art Unit 3728

/Mickey Yu/  
Supervisory Patent Examiner, Art  
Unit 3728